

MEMORANDUM OF UNDERSTANDING

Kennecott Utah Copper Corporation
Utah Department of Environmental Quality
U.S. Environmental Protection Agency

OCT 2 1995

INTRODUCTION

In the fall of 1990, the U. S. Environmental Protection Agency (EPA) began to compile data for the purposes of preparing documentation to determine if the properties owned by Kennecott Utah Copper Corporation (KUC) and nearby impacted properties should be listed on the National Priorities List (NPL) of sites eligible for federal cleanup funding under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended in 1986 by the Superfund Amendments and Reauthorization Act. After the parties could not agree on the terms of a site-wide Consent Decree, EPA proposed two sites, the Kennecott North Site and the Kennecott South Site, for listing on the NPL in January 1994.

Beginning in early 1991, KUC began to cooperate with EPA and the Utah Department of Environmental Quality (UDEQ) in identifying the environmental problems associated with these Sites, studying these problems, and developing work plans with EPA to remediate them. Twenty-two operable units have been identified and progress has been made on all of them (see attached table). In addition, KUC has participated with EPA, UDEQ, and others in a Groundwater Technical Review Committee, the Risk Assessment Task Force, and the Ecological Technical Advisory Group. KUC has finalized a settlement of a Natural Resource Damage Claim for damages to groundwater with the state trustee. KUC is conducting studies to determine the ecological risks associated with historical and current mining activities. Finally, KUC has participated with EPA and UDEQ in evaluating several Administrative Reforms designed to increase public participation and streamline cleanup decisions. In summary, KUC has shown ample evidence of good faith through substantial progress toward a complete cleanup of their sites in the Oquirrh Mountains.

Although there are substantial cleanup activities yet to be performed, EPA and UDEQ now have sufficient evidence that cleanups by KUC can be performed without making a final listing decision. This document represents the understandings reached by EPA, UDEQ, and KUC. In exchange for KUC's agreement to continue specified cleanup activities at the sites, EPA agrees not to proceed with a decision regarding final listing of KUC properties in the Oquirrh Mountains on the NPL or equivalent list.

KENNECOTT UTAH COPPER AGREES TO:

1. Complete the RI/FS on the South Zone Groundwater problems within the next two and one-half years.
2. Complete a removal action on the Wastewater Treatment Plant Sludge Ponds within three years of completion of the repository. This action will include currently identified smelter and refinery soils. The soils cleanup at the smelter and refinery may be extended in scope and duration if additional contaminated soils that require cleanup are found.

3. Complete the South Jordan Evaporation Ponds cleanup within one year.

4. Start a RI/FS on the North Zone groundwater problems (e.g. originating at the refinery and smelter sites) within one year of completion of the ecological and human health risk assessments, if such an RI/FS is shown necessary based on ecological and human health risk assessments. This RI/FS should be completed within 3 years after the start.

5. Continue groundwater source control measures at the Bingham Canyon Mine waste rock dumps and other KUC facilities under the auspices of the UDEQ.

6. Complete environmental assessments of currently identified on-site historic facilities and their associated wastes and conduct cleanups of these wastes if shown necessary by the ecological and human health risk assessments.

7. Completion of the currently-defined ecological risk assessment studies and development of recommendations within one year. The scope and/or schedule may be extended pending review of results from ongoing studies.

Items 1 - 4 will be completed pursuant to agreed-upon work plans and separately-negotiated Administrative Orders on Consent. The time frames referenced in the items listed above represent current best estimates and may be extended only by mutual consent of all parties.

All work items are subject to review and approval by EPA and/or UDEQ as appropriate.

THE U.S. ENVIRONMENTAL PROTECTION AGENCY AGREES TO:

1. Take no further action relating to the final listing of the Kennecott North Zone and the Kennecott South Zone on the NPL unless KUC fails to perform the activities as described above.

2. Proceed to withdraw the sites from proposal for inclusion on the NPL after construction of all cleanup projects is completed.

3. Consider KUC's operational needs in the scheduling of all studies and cleanups.

4. Keep UDEQ informed and timely supply documents to UDEQ for review.

5. Work with UDEQ to avoid duplicate oversight costs.

THE UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY AGREES TO:

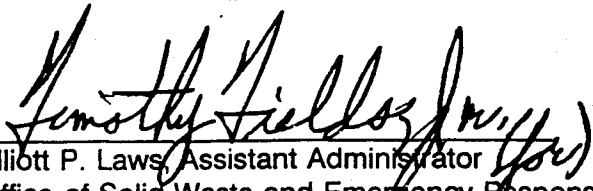
1. Maintain jurisdiction over the efforts to control discharges from the Bingham Canyon Mine waste rock and other KUC facilities covered by state groundwater permits.

2. Participate in the review and guidance of cleanup and study work, as described above, while avoiding to the extent practicable duplicative oversight costs.

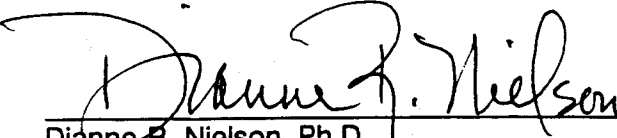
ALL PARTIES, KUC, EPA, and UDEQ, AGREE THAT:

This Memorandum of Understanding represents the concepts to be used for future management of the site. All parties reserve all of their legal and administrative rights under federal and state law.


SIGNATURES:


Elliott P. Laws, Assistant Administrator
Office of Solid Waste and Emergency Response
U.S. Environmental Protection Agency

Dated: 9/26/95


Dianne R. Nielson, Ph.D.
Executive Director
Department of Environmental Quality
State of Utah

Dated: 9/27/95


Preston Chiaro, Vice President
Kennecott Utah Copper Corporation

Dated: 9/27/95

ATTACHMENT

KENNECOTT NORTH AND SOUTH ZONES Operable Units and Status

Operable Unit	Status
OU1 Bingham Creek	
Phase 1 residential soils	completed
Phase 2 channel sediments	completed, except on RR tracks
Phase 3 residential soils	in progress, other PRP
OU2 SW Jordan Groundwater Plume	RI/FS in progress
OU3 Butterfield Mine	
Phase 1 waste rock	completed
Phase 2 downstream soils	study in progress
OU4 Large Bingham Reservoir	
Phase 1, first basin	completed
Phase 2, second basin	near completion
OU5 ARCO Tails	other PRP, cleanup in progress
OU6 Lark	completed
OU7 S. Jordan Evap. Ponds	near completion
OU8 WWTP Sludge Ponds	cleanup in progress
OU9 Magna Soils	study completed, no further action
OU10 Copperton Soils	study completed, no further action
OU11 Bingham Canyon	studies in progress, cleanup of uranium facility completed
OU12 East Side Collection	cleanup in progress
OU13 Smelter and Acid Plant	studies in progress
OU14 Refinery	studies in progress
OU15 Magna Tailings Pond	studies in progress
OU16 Bingham Creek underflow	cleanup in progress

OU17 Bastian Sink

study completed, PRPs
negotiating on cleanup

OU18 Acid Mine Drainage

see OU 11, OU 12, and OU 16

OU19 Smelter fallout

Kessler Canyon studies in
progress

OU20 Pine Canyon

study in progress, other PRPs
are also involved

OU21 Cobalt Refinery

other PRPs, study in progress

OU22 Great Salt Lake

studies in progress